What is claimed is:

1. A video mixer apparatus comprising:

a video-picture-signal input section that receives video picture signals via at least three or more channels;

at least three or more control instructing operators provided in corresponding relation to the at least three or more channels, each of said control instructing operators being operable to give a signal control instruction for a corresponding one of the channels in accordance with an operated amount of the control instructing operator;

a control section that performs signal control on the video picture signals of individual ones of the channels on the basis of respective ones of the signal control instructions given by said control instructing operators; and

a video-picture-signal synthesis section that synthesizes the video picture signals of the individual channels having been subjected to the signal control by said control section.

2. A video mixer apparatus as claimed in claim 1 wherein each of said control instructing operators gives the signal control instruction about at least one of hue adjustment and gain adjustment for the video picture signal of the corresponding channel received via said

video-picture-signal input section , and

wherein said video-picture-signal synthesis section synthesizes the video picture signals of the at least three or more channels with hues and gains having been adjusted in accordance with the signal control instructions.

3. A video mixer apparatus as claimed in claim 1 which further comprises:

an operation section that determines, through predetermined operations, the signal control instructions corresponding to the operated amounts of said control instructing operators; and

a setting section that sets operation parameters for use by said operation section,

said video-picture-signal synthesis section synthesizes the video picture signals of the at least three or more channels in accordance with the signal control instructions determined by said operation section.

4. A video mixer apparatus as claimed in claim 1 which further comprises indicators provided in corresponding relation to the channels, and each of said indicators indicates whether a video picture signal of the corresponding channel has been input to said video-picture-signal input section , so that said indicators inform a user of which of the channels can be currently used for signal synthesis by said video-picture-signal synthesis section.

5. A video mixer apparatus as claimed in claim 1 which further comprises an output section that outputs a synthesized video picture signal having been created by said video-picture-signal synthesis section, and wherein said output section is further capable of independently and simultaneously displaying, on a single screen, the video picture signals of all of the channels that are to be synthesized.

6. A video mixer apparatus comprising:

a video-picture-signal input section that receives video picture signals via at least three or more channels;

a video-picture-signal synthesis section that synthesizes the video picture signals of individual ones of the channels received by said video-picture-signal input section ;

a designation section that designates the video picture signals of two desired channels from among the video picture signals to be synthesized by said video-picture-signal synthesis section;

a contact-type operator that, by being contacted at a predetermined position thereof, gives a signal control instruction, corresponding to the contacted predetermined position, with respect to the designated video picture signals of the two desired channels; and

a control section that, on the basis of the signal control instruction given by said contact-type operator,

performs signal control on the designated video picture signals of the two desired channels to be synthesized by said video-picture-signal synthesis section.

7. A video mixer apparatus comprising:

a video-picture-signal input section that receives video picture signals via at least three or more channels;

a video-picture-signal synthesis section that synthesizes the video picture signals of individual ones of the channels received by said video-picture-signal input section ;

at least three or more control instructing operators provided in corresponding relation to the channels, each of said control instructing operators being operable to give a signal control instruction about at least one of a displayed position and displayed size of the video picture signal of a corresponding one of the channels; and

a control section that performs signal control on each of the video picture signals of the channels to be synthesized by said video-picture-signal synthesis section, in accordance with the signal control instruction given by said control instructing operator corresponding to the channel of the video picture signal.

8. A video mixer apparatus as claimed in claim 7 which further comprises a storage section that, for each of the channels, stores signal control-instructing information

about at least one of the displayed position and displayed size, and

wherein said control section performs signal control, corresponding to the signal-control instructing information for the individual channels read out from said storage section, on the video picture signals of the channels to be synthesized by said video-picture-signal synthesis section.

9. A video mixer apparatus as claimed in claim 8 wherein each of said control instructing operators is a moving-type operator that automatically moves to an operational position corresponding to the signal-control instructing information for the corresponding channel read out from said storage section.

10. A video mixer apparatus comprising:

a video-picture-signal input section that receives video picture signals via at least three or more channels;

a video-picture-signal synthesis section that synthesizes the video picture signals of individual ones of the channels received by said video-picture-signal input section;

a display section that visually displays a video picture;

a function-shift instructing section that instructs a shift between a plurality of display functions including at

least a solo function, cue function and preview function, the solo function being a function for selecting a particular channel from among the at least three or more channels and displaying only a video picture signal of the particular channel, the cue function being a function for selecting a particular channel from among the at least three or more channels and displaying a video picture signal of the particular channel in a different style from video picture signals of the other channels, the preview function being a function for previewing a video picture signal of a desired one of the channels; and

a control section that controls a video picture signal to be displayed by said display section, said control section controlling said display section to switch the video picture to be displayed, in accordance with a function shift instruction given by said function-shift instructing section.

11. A video mixer apparatus comprising:

a video-picture-signal input section that receives video picture signals via a plurality of channels, each of the video signals containing a plurality of predetermined components;

a video-picture-signal synthesis section that synthesizes the video picture signals of individual ones of the channels received via said video-picture-signal input section;

an operator; and

an operation section capable of performing an arithmetic or logical operation on the basis of operation of said operator and using a portion or all of the plurality of predetermined components contained in the video picture signals of the individual channels,

wherein said video-picture-signal synthesis section can synthesize the video picture signals of the individual channels using a result of the arithmetic or logical operation performed by said operation section.